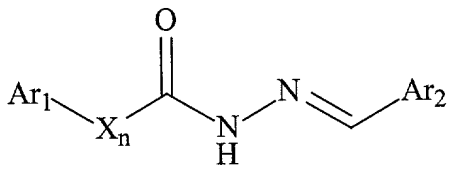
WHAT IS CLAIMED IS:

1. A method for increasing the bactericidal action of an antibacterial agent comprising contacting a bacterium with an antibiotic potentiator, wherein said potentiator is an acyl hydrazide, an oxy amide, or an 8-hydroxy quinoline.

2. The method of claim 1, wherein said acyl hydrazide has the general formula:



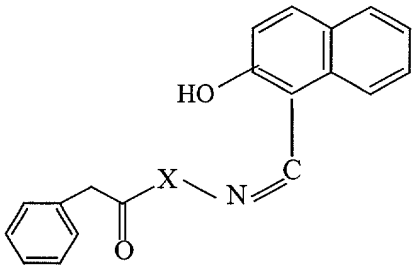
(I)

wherein Ar_1 and Ar_2 are independently aryl, substituted aryl, cycloalkyl, bicycloalkyl, substituted bicycloalkyls, bicycloalkenyl, or substituted bicycloalkenyl, X is CH_2, $C(CH_3)_2$, NH, N-alkyl, N-phenyl, or S and n is 0 or 1.

3. The method of claim 2, wherein Ar_1 is selected from the group consisting of phenyl-, 4-toluoyl-, 4-isopropyl-1-phenyl-, 4-*t*-butyl-1-phenyl-, 2-anisole, 4-ethyl-1-phenyl-, 3-chloro-1-phenyl-, bicyclo[2.2.1]heptane, bicyclo[2.2.1]hept-5-ene, bicyclo[4.1.0]heptane, hexahydro-2,5-methano-pentalene, 1-pyridin-3-yl-, 7,7,-dimethyl-2-oxo-bicyclo[2.2.1]heptane, cylcohexyl-, cycloheptyl- and 4,7,7-trimethyl-3-oxo-2-oxa-bicyclo[2.2.1]heptane.

4. The method of claim 2, wherein Ar_2 is selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol- 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

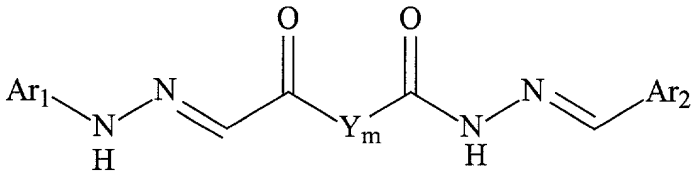
5. The method of claim 1, wherein said acyl hydrazide has the formula:



(II)

wherein X is CH_2, $C(CH_3)_2$, NH, N-alkyl or N-phenyl.

6. The method of claim 1, wherein said acyl hydrazide has the formula:

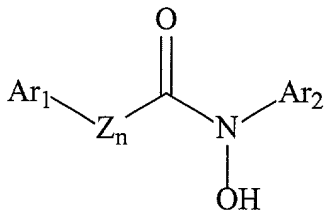


(III)

wherein Ar_1 and Ar_2 are independently aryl or substituted aryls, Y comprises one or more of C, N, and O and m is 1, 2, 3, 4, 5, 6, 7 or 8.

7. The method of claim 6, wherein Ar_1 and Ar_2 are independently selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol-, 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

8. The method of claim 1, wherein said oxy amide has the formula:

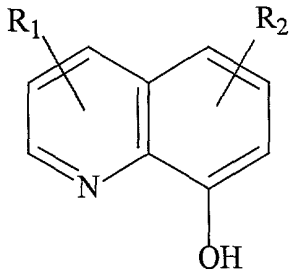


(IV)

wherein Ar_1 and Ar_2 are independently phenyl, naphthyl, toluoyl, anisole, alkylphenyl, alkoxyphenyl, halophenyl, benzyl, or pyridinyl, and Z comprises one or more of C, N, and O, and n=0 or 1.

9. The method of claim 8, wherein Ar_1 is an anisole, n=0, and Ar_2 is a phenyl.

10. The method of claim 1, wherein said 8-hydroxyquinoline has the formula:



(V)

wherein R_1 and R_2 are independently H, alkyl, alkoxy, a halogen, substituted or unsubstituted 1-allylphenyl, benzyl, a hydrazino group (-NHNH2), a substituted hydrazino group, pyrazolyl, alkyl substituted pyrazolyl, an unsubstituted pyridazinyl group, or a substituted pyridazinyl group.

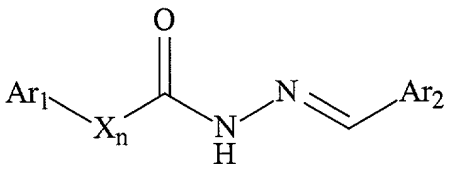
11. The method of claim 10, wherein R_1 is 2-(3,5-dimethyl-pyrazol-1-yl) and R_2 is H.

12. The method of claim 1, wherein said bacterium is of the genus *Staphylococcus, Streptococcus, Enterococcus, Mycobacterium, Listeria, Pseudomonas, Serratia, Escherichia, Klebsiella, Haemophilus, Enterobacter, Proteus, Acinetobacter, Neisseria, Stenotrophomonas, Citrobacter, Salmonella, Morganella Corynebacterium, Pasteurella, Stenotrohonomas, Aeromonas, Bordatella, Providencia, Bacteroides, Shigella, Legionella, Vibrio, Yersinia, Helicobacter, Propionibacterium, Gardnerella* or *Campylobacter.*

13. The method of claim 1, wherein said antibacterial agent is selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants.

14. A method of treating a subject with a bacterial infection comprising administering to said subject an antibacterial agent and an antibiotic potentiator, wherein said potentiator is an acyl hydrazide, an oxy amide, or an 8-hydroxy quinoline.

15. The method of claim 14, wherein said acyl hydrazide has the general formula:



(I)

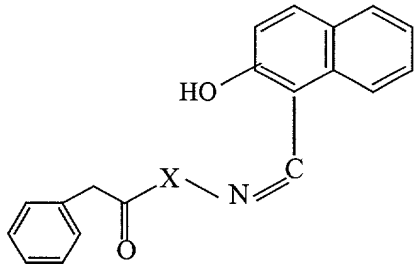
wherein Ar_1 and Ar_2 are independently aryl, substituted aryl, cycloalkyl, bicycloalkyl, substituted bicycloalkyls, bicycloalkenyl, or substituted bicycloalkenyl, X is CH_2, $C(CH_3)_2$, NH, N-alkyl, N-phenyl, or S and n is 0 or 1.

16. The method of claim 15, wherein Ar_1 is selected from the group consisting of phenyl-, 4-toluoyl-, 4-isopropyl-1-phenyl-, 4-*t*-butyl-1-phenyl-, 2-anisole, 4-ethyl-1-phenyl-, 3-chloro-1-phenyl-, bicyclo[2.2.1]heptane, bicyclo[2.2.1]hept-5-ene, bicyclo[4.1.0]heptane, hexahydro-2,5-methano-pentalene, 1-pyridin-3-yl-, 7,7,-dimethyl-2-oxo-bicyclo[2.2.1]heptane, cylcohexyl-, cycloheptyl- and 4,7,7-trimethyl-3-oxo-2-oxa-bicyclo[2.2.1]heptane.

17. The method of claim 15, wherein Ar_2 is selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-

phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol- 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

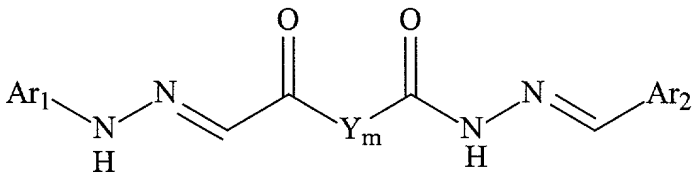
18. The method of claim 14, wherein said acyl hydrazide has the formula:



(II)

wherein X is CH_2, $C(CH_3)_2$, NH, N-alkyl or N-phenyl.

19. The method of claim 14, wherein said acyl hydrazide has the formula:

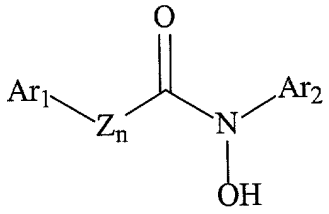


(III)

wherein Ar_1 and Ar_2 are independently aryl or substituted aryls, Y comprises one or more of C, N, and O and m is 1, 2, 3, 4, 5, 6, 7 or 8.

20. The method of claim 19, wherein Ar_1 and Ar_2 are independently selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol-, 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

21. The method of claim 14, wherein said oxy amide has the formula:

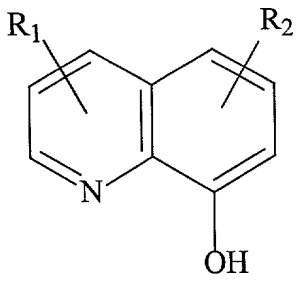


(IV)

wherein Ar_1 and Ar_2 are independently phenyl, naphthyl, toluoyl, anisole, alkylphenyl, alkoxyphenyl, halophenyl, benzyl, or pyridinyl, and Z comprises one or more of C, N, and O, and n=0 or 1.

22. The method of claim 21, wherein Ar_1 is an anisole, n=0, and Ar_2 is a phenyl.

23. The method of claim 14, wherein said 8-hydroxyquinoline has the formula:



(V)

wherein R_1 and R_2 are independently H, alkyl, alkoxy, a halogen, substituted or unsubstituted 1-allylphenyl, benzyl, a hydrazino group (-NHNH2), a substituted hydrazino group, pyrazolyl, alkyl substituted pyrazolyl, an unsubstituted pyridazinyl group, or a substituted pyridazinyl group.

24. The method of claim 23, wherein R_1 is 2-(3,5-dimethyl-pyrazol-1-yl) and R_2 is H.

25. The method of claim 14, wherein said bacterial infection is of the genus *Staphylococcus, Streptococcus, Enterococcus, Mycobacterium, Listeria, Pseudomonas, Serratia, Escherichia, Klebsiella, Haemophilus, Enterobacter, Proteus, Acinetobacter, Neisseria, Stenotrophomonas, Citrobacter, Salmonella,*

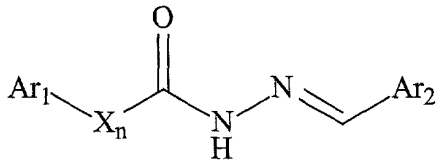
Morganella, Corynebacterium, Pasteurella, Stenotrohonomas, Aeromonas, Bordatella, Providencia, Bacteroides, Shigella, Legionella, Vibrio, Yersinia, Helicobacter, Propionibacterium, Gardnerella or *Campylobacter.*

26. The method of claim 14, wherein said antibacterial agent is selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants.

27. The method of claim 26, further comprising a first and a second antibacterial agent selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants; wherein said first and said second antibacterial agents are chemically distinct compounds.

28. A bactericidal pharmaceutical composition comprising an antibacterial agent and an antibiotic potentiator, wherein said potentiator is an acyl hydrazide, an oxy amide, or an 8-hydroxy quinoline.

29. The composition of claim 28, wherein said acyl hydrazide has the general formula:



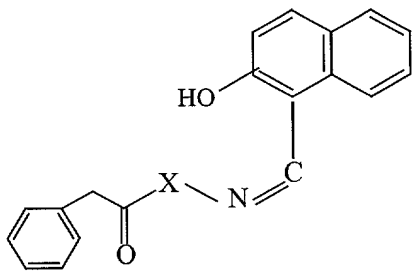
(I)

wherein Ar_1 and Ar_2 are independently aryl, substituted aryl, cycloalkyl, bicycloalkyl, substituted bicycloalkyls, bicycloalkenyl, or substituted bicycloalkenyl, X is CH_2, $C(CH_3)_2$, NH, N-alkyl, N-phenyl, or S and n is 0 or 1.

30. The composition of claim 29, wherein Ar_1 is selected from the group consisting of phenyl-, 4-toluoyl-, 4-isopropyl-1-phenyl-, 4-*t*-butyl-1-phenyl-, 2-anisole, 4-ethyl-1-phenyl-, 3-chloro-1-phenyl-, bicyclo[2.2.1]heptane, bicyclo[2.2.1]hept-5-ene, bicyclo[4.1.0]heptane, hexahydro-2,5-methano-pentalene, 1-pyridin-3-yl-, 7,7,-dimethyl-2-oxo-bicyclo[2.2.1]heptane, cylcohexyl-, cycloheptyl- and 4,7,7-trimethyl-3-oxo-2-oxa-bicyclo[2.2.1]heptane.

31. The composition of claim 29, wherein Ar_2 is selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol- 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

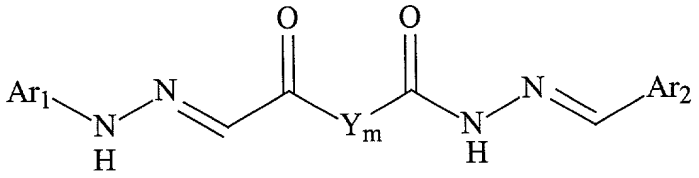
32. The composition of claim 28, wherein said acyl hydrazide has the formula:



(II)

wherein X is CH_2, $C(CH_3)_2$, NH, N-alkyl or N-phenyl.

33. The composition of claim 28, wherein said acyl hydrazide has the formula:

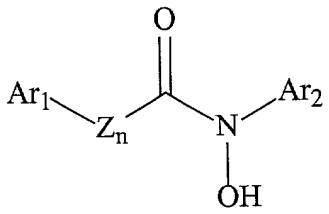


(III)

wherein Ar_1 and Ar_2 are independently aryl or substituted aryls, Y comprises one or more of C, N, and O and m is 1, 2, 3, 4, 5, 6, 7 or 8.

34. The composition of claim 33, wherein Ar_1 and Ar_2 are independently selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol-, 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

35. The composition of claim 28, wherein said oxy amide has the formula:

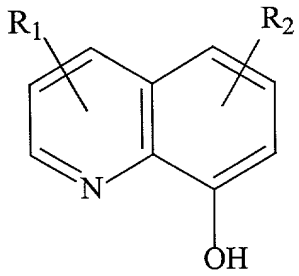


(IV)

wherein Ar_1 and Ar_2 are independently phenyl, naphthyl, toluoyl, anisole, alkylphenyl, alkoxyphenyl, halophenyl, benzyl, or pyridinyl, and Z comprises one or more of C, N, and O, and n=0 or 1.

36. The composition of claim 35, wherein Ar_1 is an anisole, n=0, and Ar_2 is a phenyl.

37. The composition of claim 28, wherein said 8-hydroxyquinoline has the formula:



(V)

wherein R_1 and R_2 are independently H, alkyl, alkoxy, a halogen, substituted or unsubstituted 1-allylphenyl, benzyl, a hydrazino group (-NHNH2), a substituted hydrazino group, pyrazolyl, alkyl substituted pyrazolyl, an unsubstituted pyridazinyl group, or a substituted pyridazinyl group.

38. The composition of claim 37, wherein R_1 is 2-(3,5-dimethyl-pyrazol-1-yl) and R_2 is H.

39. The bactericidal composition of claim 28, wherein said antibacterial agent is selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants.

40. The bactericidal composition of claim 39, further comprising a first and a second antibacterial agent selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants; wherein said first and said second antibacterial agents are chemically distinct compounds.

41. A method of screening for candidate acyl hydrazide antibiotic potentiators, oxy amide antibiotic potentiators or 8-hydroxy quinoline potentiators comprising:

(a) contacting a bacterial cell with an antibacterial agent;

(b) contacting a bacterial cell with said antibacterial agent and an acyl hydrazide, an oxy amide, or an 8-hydroxy quinoline; and

(c) comparing the bactericidal effect of said antibacterial agent in the presence and absence of said acyl hydrazide, oxy amide or 8-hydroxy quinoline,

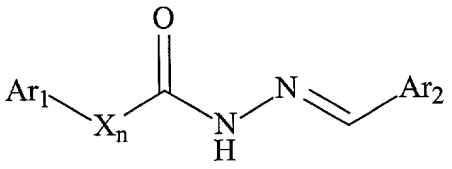
wherein a decrease in bacterial cell viability indicates said candidate acyl hydrazide, oxy amide or 8-hydroxy quinoline is an antibiotic potentiator.

42. The method of claim 41, wherein said antibacterial agent is selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants.

43. The method of claim 41, wherein said bacterial cell is of the genus *Staphylococcus, Streptococcus, Enterococcus, Mycobacterium, Listeria, Pseudomonas, Serratia, Escherichia, Klebsiella, Haemophilus, Enterobacter, Proteus, Acinetobacter, Neisseria, Stenotrophomonas, Citrobacter, Salmonella, Morganella, Corynebacterium, Pasteurella, Stenotrohonomas, Aeromonas, Bordatella, Providencia, Bacteroides, Shigella, Legionella, Vibrio, Yersinia, Helicobacter, Propionibacterium, Gardnerella* or *Campylobacter.*

44. A method of treating a subject for a bacterial biofilm infection comprising administering to said subject an antibacterial agent and an antibiotic potentiator, wherein said potentiator is an acyl hydrazide, an oxy amide, or an 8-hydroxy quinoline.

45. The method of claim 44, wherein said acyl hydrazide has the general formula:



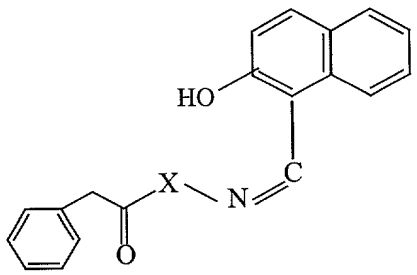
(I)

wherein Ar_1 and Ar_2 are independently aryl, substituted aryl, cycloalkyl, bicycloalkyl, substituted bicycloalkyls, bicycloalkenyl, or substituted bicycloalkenyl, X is CH_2, $C(CH_3)_2$, NH, N-alkyl, N-phenyl, or S and n is 0 or 1.

46. The method of claim 45, wherein Ar_1 is selected from the group consisting of phenyl-, 4-toluoyl-, 4-isopropyl-1-phenyl-, 4-*t*-butyl-1-phenyl-, 2-anisole, 4-ethyl-1-phenyl-, 3-chloro-1-phenyl-, bicyclo[2.2.1]heptane, bicyclo[2.2.1]hept-5-ene, bicyclo[4.1.0]heptane, hexahydro-2,5-methano-pentalene, 1-pyridin-3-yl-, 7,7,-dimethyl-2-oxo-bicyclo[2.2.1]heptane, cylcohexyl-, cycloheptyl- and 4,7,7-trimethyl-3-oxo-2-oxa-bicyclo[2.2.1]heptane.

47. The method of claim 45, wherein Ar_2 is selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol- 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

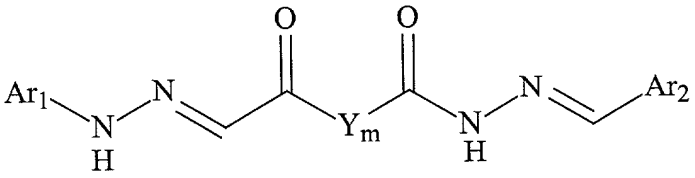
48. The method of claim 44, wherein said acyl hydrazide has the formula:



(II)

wherein X is CH_2, $C(CH_3)_2$, NH, N-alkyl or N-phenyl.

49. The method of claim 44, wherein said acyl hydrazide has the formula:

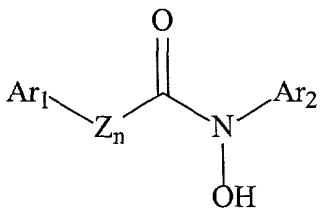


(III)

wherein Ar_1 and Ar_2 are independently aryl or substituted aryls, Y comprises one or more of C, N, and O and m is 1, 2, 3, 4, 5, 6, 7 or 8.

50. The method of claim 49, wherein Ar_1 and Ar_2 are independently selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol-, 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

51. The method of claim 44, wherein said oxy amide has the formula:

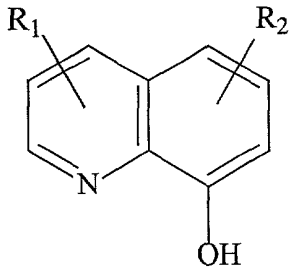


(IV)

wherein Ar_1 and Ar_2 are independently phenyl, naphthyl, toluoyl, anisole, alkylphenyl, alkoxyphenyl, halophenyl, benzyl, or pyridinyl, and Z comprises one or more of C, N, and O, and n=0 or 1.

52. The method of claim 51, wherein Ar_1 is an anisole, n=0, and Ar_2 is a phenyl.

53. The method of claim 44, wherein said 8-hydroxyquinoline has the formula:



(V)

wherein R_1 and R_2 are independently H, alkyl, alkoxy, a halogen, substituted or unsubstituted 1-allylphenyl, benzyl, a hydrazino group (-NHNH2), a substituted hydrazino group, pyrazolyl, alkyl substituted pyrazolyl, an unsubstituted pyridazinyl group, or a substituted pyridazinyl group.

54. The method of claim 53, wherein R_1 is 2-(3,5-dimethyl-pyrazol-1-yl) and R_2 is H.

55. The method of claim 44, wherein said biofilm is of the genus *Staphylococcus, Streptococcus, Enterococcus, Mycobacterium, Listeria, Pseudomonas, Serratia, Escherichia, Klebsiella, Haemophilus, Enterobacter, Proteus, Acinetobacter, Neisseria, Stenotrophomonas, Citrobacter, Salmonella, Morganella, Corynebacterium, Pasteurella, Stenotrohonomas, Aeromonas, Bordatella, Providencia, Bacteroides, Shigella, Legionella, Vibrio, Yersinia, Helicobacter, Propionibacterium, Gardnerella* or *Campylobacter.*

56. The method of claim 52, wherein said infection is resistant to antibacterial agents.

57. The method of claim 56, wherein said infection is a chronic infection or persistent infection.

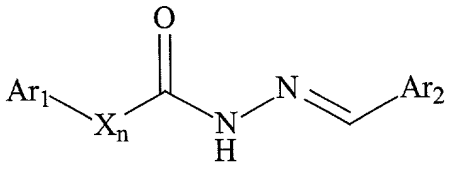
58. The method of claim 54, wherein said infection is endocarditis, osteomyelitis, an infection in a neutropenic subject or a biomaterial infection.

59. The method of claim 44, wherein said antibacterial agent is selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants.

60. The method of claim 59, further comprising a first and a second antibacterial agent selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants; wherein said first and said second antibacterial agents are chemically distinct compounds.

61. A pharmaceutical composition for inhibiting bacterial biofilm viability comprising an antibacterial agent and an antibiotic potentiator, wherein said potentiator is an acyl hydrazide, an oxy amide, or an 8-hydroxy quinoline.

62. The composition of claim 61, wherein said acyl hydrazide has the general formula:



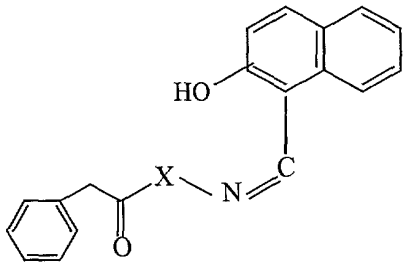
(I)

wherein Ar_1 and Ar_2 are independently aryl, substituted aryl, cycloalkyl, bicycloalkyl, substituted bicycloalkyls, bicycloalkenyl, or substituted bicycloalkenyl, X is CH_2, $C(CH_3)_2$, NH, N-alkyl, N-phenyl, or S and n is 0 or 1.

63. The composition of claim 62, wherein Ar_1 is selected from the group consisting of phenyl-, 4-toluoyl-, 4-isopropyl-1-phenyl-, 4-*t*-butyl-1-phenyl-, 2-anisole, 4-ethyl-1-phenyl-, 3-chloro-1-phenyl-, bicyclo[2.2.1]heptane, bicyclo[2.2.1]hept-5-ene, bicyclo[4.1.0]heptane, hexahydro-2,5-methano-pentalene, 1-pyridin-3-yl-, 7,7,-dimethyl-2-oxo-bicyclo[2.2.1]heptane, cylcohexyl-, cycloheptyl- and 4,7,7-trimethyl-3-oxo-2-oxa-bicyclo[2.2.1]heptane.

64. The composition of claim 62, wherein Ar_2 is selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol- 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

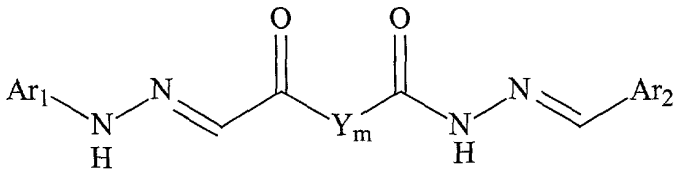
65. The composition of claim 61, wherein said acyl hydrazide has the formula:



(II)

wherein X is CH_2, $C(CH_3)_2$, NH, N-alkyl or N-phenyl.

66. The composition of claim 61, wherein said acyl hydrazide has the formula:

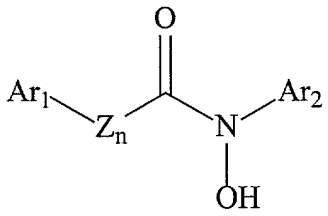


(III)

wherein Ar_1 and Ar_2 are independently aryl or substituted aryls, Y comprises one or more of C, N, and O and m is 1, 2, 3, 4, 5, 6, 7 or 8.

67. The composition of claim 66, wherein Ar_1 and Ar_2 are independently selected from the group consisting of 2-hydroxy-1-naphthyl-, 2-phenol-, 3,5-dichloro-2-phenol-, 4-diethylamino-2-phenol-, 3-methyl-2-phenol-, 4-methyl-2-phenol, 5-methyl-2-phenol, 5-bromo-2-phenol, 5-bromo-3-methoxy-2-phenol, 3-ethoxy-2-phenol-, 4,6-dimethoxy-2-phenol-, 4-methoxy-2-phenol and 2-thio-1-phenyl.

68. The composition of claim 61, wherein said oxy amide has the formula:

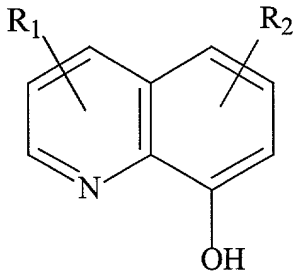


(IV)

wherein Ar_1 and Ar_2 are independently phenyl, naphthyl, toluoyl, anisole, alkylphenyl, alkoxyphenyl, halophenyl, benzyl, or pyridinyl, and Z comprises one or more of C, N, and O, and n=0 or 1.

69. The composition of claim 68, wherein Ar_1 is an anisole, n=0, and Ar_2 is a phenyl.

70. The composition of claim 61, wherein said 8-hydroxyquinoline has the formula:



(V)

wherein R_1 and R_2 are independently H, alkyl, alkoxy, a halogen, substituted or unsubstituted 1-allylphenyl, benzyl, a hydrazino group (-NHNH2), a substituted hydrazino group, pyrazolyl, alkyl substituted pyrazolyl, an unsubstituted pyridazinyl group, or a substituted pyridazinyl group.

71. The composition of claim 70, wherein R_1 is 2-(3,5-dimethyl-pyrazol-1-yl) and R_2 is H.

72. The composition of claim 61, wherein said biofilm is of the genus *Staphylococcus, Streptococcus, Enterococcus, Mycobacterium, Listeria, Pseudomonas, Serratia, Escherichia, Klebsiella, Haemophilus, Enterobacter, Proteus, Acinetobacter, Neisseria, Stenotrophomonas, Citrobacter, Salmonella,*

Morganella, Corynebacterium, Pasteurella, Stenotrohonomas, Aeromonas, Bordatella, Providencia, Bacteroides, Shigella, Legionella, Vibrio, Yersinia, Helicobacter, Propionibacterium, Gardnerella or *Campylobacter.*

73. The composition of claim 61, wherein said infection is resistant to antibacterial agent agents.

74. The composition of claim 73, wherein said infection is a chronic infection or persistent infection.

75. The composition of claim 74, wherein said infection is endocarditis, osteomyelitis, an infection in a neutropenic subject or a biomaterial infection.

76. The composition of claim 61, wherein said antibacterial agent is selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants.

77. The composition of claim 76, further comprising a first and a second antibacterial agent selected from the group consisting of macrolides, ketolides, tetracyclines, chloramphenicols, lincosamides, oxazolidinones, rifamycins, aminoglycosides, glycopeptides, daptomycins, fusidic acids, sulphonamides, cycloserines, β-lactams, diaminopyrimidines, isonicotinic acids, nitrofurans, antiseptics and disinfectants; wherein said first and said second antibacterial agents are chemically distinct compounds.

78. A method for increasing the bactericidal action of an antibacterial agent comprising:

(a) contacting a bacterial cell with an antibacterial agent; and

(b) contacting said bacterial cell with an acyl hydrazide potentiator, an oxy amide potentiator, or an 8-hydroxy quinoline potentiator,

wherein said potentiator promotes the intracellular accumulation of a metal.

79. The method of claim 78, wherein said metal is iron, copper or manganese.